What is Startup Downloader?

Startup Downloader (STD) is a control panel (‘cdev’) that lets you make sets of PostScript fonts and text files (.ps files). These sets are actually small applications that, when double clicked, download the files you specify to your printer.

How do I install STD?

To install STD, just drag it into your System Folder. If you’re using System 7, you can place STD anywhere on your disk.

What does STD need to work?

STD needs System 6 or System 7, HFS[1], and a PostScript laser printer that is available under AppleTalk[2]. STD looks better under System 7, but does not need any System 7 features unless something goes wrong. Balloon help is available in the Control Panel and on (not in) the set’s icon.

Just a few warnings

STD has been used quite a bit by now, and all machine–related incompatibilities have been fixed, as I was able to grab an SE running under 6.0.5. The only problem STD has under System 6 that I know about is the cursor. If you do run into problems, contact me at any of the addresses below and I’ll try and fix the problem.

Also, STD modifies the data and resource forks of the sets it creates and saves, so you’ll have to configure any anti–virus utilities to ignore STD or your sets won’t work. STD, however, will never modify your System file, so something is definitely wrong if it tries.

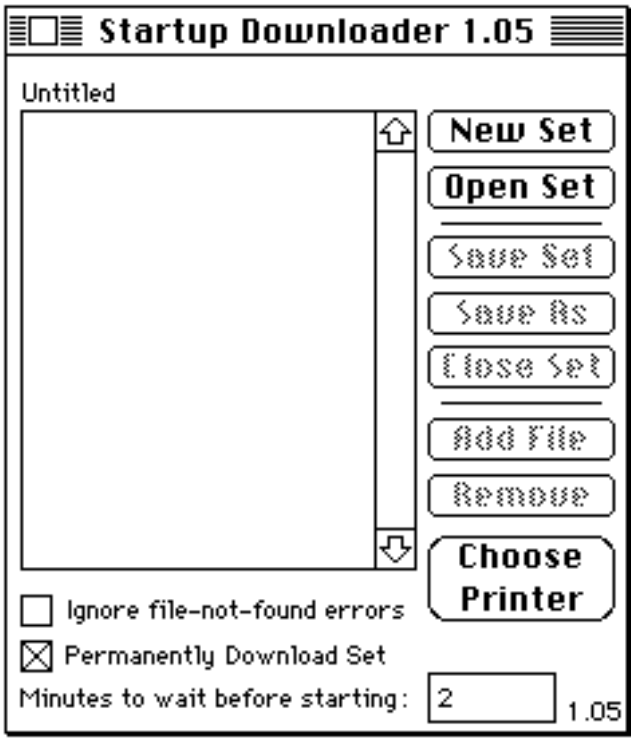
---

[1]If you can make ‘real’ folders, you are using HFS…if you are using System 6/7 and don’t know what HFS is, you’re using HFS…if the disks you use are 800K or 1400K in size, you’re using HFS.

[2]That means that even people using NetSerial, TTS Print, or some other AppleTalk to serial method will be able to use STD. And, you can use STD with UltraScript, TScript, Freedom of the Press, or any other LaserWriter impersonator. Basically, if you can select it from the Chooser using the LaserWriter driver, STD can (and will) download to it.

The Speed Introduction

Using STD is simple. Open up STD from the Control Panel, and you should see something like this:



On the right side are the ‘menu buttons’, with titles and functions that should be familiar to all of us. The big box on the left is the set list, the files currently in the set. Above the set list is the name of the current set file, which is ‘Untitled’ because there is no set active. On the bottom are three options that I’ll explain later.

To create a set, click on the “New Set” button or type ‘N’. Suddenly, buttons activate themselves, enabling you to do a whole lot more.

Click on “Add File”. STD will prompt you to select any PostScript font or text file (text files must end in ‘.ps’). Go ahead and add a couple of fonts…or click on “Add All” to add all of the fonts and .ps files in the folder. When you’re finished, click on the “Done” button.

Now click on a file in the set list, and watch the “Remove” button activate itself. If you click on “Remove”, the file will be removed from the set list.

When you’re finished, click on the “Save” button. STD will ask you to name the set and where to put save the set. Do that, and you’re done! Gee, wasn’t that fun?

Hey, what about those options?

The options down at the bottom of the window control the behavior of the extractor, which is the program that really does most of the work. Here’s a description of the options:

Minutes to wait before starting:

This controls how long the extractor will wait for a printer to become available before it complains to you. If the extractor can't find the printer within the specified time, it figures the printer is turned off and will complain.

Ignore file–not–found errors

When you create a set, you might keep it around for a long time. Unfortunately for the extractor, things change. You might decide to move those fonts somewhere else, or you might throw away some files. In any case, if the extractor can't find a file it will stop downloading, alert you that it can't find a file, and then ask you to find the file. If you don't want to be bothered by the extractor, check this option. This won't stop the extractor from reporting other errors, however.

Permanently download the files in the set

If this option is checked, the files in the set are permanently downloaded to the printer. If it is unchecked, they are sent as normal PostScript jobs. What's the difference? If a set is permanently downloaded to a printer, the fonts/files will stay in the printer's memory and be accessible until you reboot the printer. If you temporarily download a set, the fonts/files will be processed normally but won't stay in the printer after the extractor is finished. Generally speaking, fonts should be downloaded permanently and '.ps' files should be downloaded temporarily.

STD: up–close and personal

New Set: 'N'

This creates a new set.

Open Set: 'O'

Opens a set file for modification or inspection.

Save Set: 'S'

Saves the current set.

When you save a set, the first thing that happens is the set is created on disk. STD then copies the extractor into the new set, saves option settings, adds locational information for the files in the set list, and increases the partition size of the extractor depending on the number of files. If the alias manager is present, aliases of the files are also added.

Save As

This saves the current set under another name, and makes it the current set. The old set is closed.

Close Set: 'W'

Closes the current set. If the set has been changed but not saved, STD will ask you if you want to save it.

Add File: 'A'

Adds a file to the current set. If you click "Add All", all of the files in the current folder will be added. "Add All" will not add files in subfolders.

Remove: 'R'

Removes the selected file from the set list.

Choose Printer

Specifies which LaserWriter driver the extractor will use when it starts. See below for more information.

On to the Extractor

When a set is launched, the extractor first looks inside the set to see if you specified a LaserWriter file. If you didn't specify a particular LaserWriter file (with the "Choose Printer" button), or if it couldn't find the LaserWriter file you wanted, it checks in the "Extensions" folder for a file named "LaserWriter". If there is no extensions folder, if the System is 6.0.x, or if there isn't a file named "LaserWriter", it looks for "LaserWriter" in the active System Folder. If it doesn't find a LaserWriter file, it will ask you for one.

Assuming it's found a LaserWriter file, it then waits for the printer to come on–line (the printer is the one you chose in the Chooser with the LaserWriter driver). When the printer comes on–line, it opens the printer. Note that if the printer is busy and on–line, the extractor will still only wait for the number of minutes you specified.

After the extractor has opened the printer, it starts downloading the files in the set in the order they were specified (the order that they appear in the status window list). The extractor first looks in the place where the file was originally. If the file not there, it then looks in the folder/directory that the set is in. If it still can't find the file, and if you are running System 7, it tries to find the file by using the Alias Manager. Finally, if it still can't find the file and if you haven't told the extractor to ignore file–not–found errors, it will ask you to find it.

If while a file is downloading a PostScript error occurs, the extractor will notify you of the error and ask you what to do. You have three options:

Quit

This should be self–explanatory.

Another Printer

Means that you want the extractor to use another printer; the extractor will ask you for another LaserWriter file, and download to it.

Try Again

Tells the extractor that you want it to try downloading again. The printer is NOT rebooted.

Using Startup Downloader

Startup Downloader was primarily designed so people with LaserWriters without hard disks attached and who were running System 7 could create a set of fonts or '.ps' files and put the set in the Startup Folder. Every time they turned their machine on the set would download to the printer, freeing them from the drudgery of downloading fonts by hand with the LWFU or SendPS. (The same effect can be done with System 6 by using the 'Set Startup…' command from the Finder.)

Of course, you're not limited to that. By using HAM, you can put all of the sets in a folder, put that folder in the Apple Menu, and have font family downloading a menu selection away. This is handy when you're not sure which font family you'll be using when you start working.

If you really know what you're doing, you can make sets that reboot the printer and download the font(s) you want, making sure that the printer memory is clear…or make a .ps file that prints whatever you want on every page that gets printed during the session.

If you want to distribute documentation in '.ps' format, you can group all the files in a folder, make a set of them, and save the set in the folder. The folder can then be put on disk, downloaded, and distributed around as a kind of 'runtime documentation' system. Be sure to tell your users to choose the right printer, though. (I guess the network extension would be '.STD' or something like that.)

Things you should know

Before you go off and download the whole Adobe Type Library, there are some things that you should know about STD:

- The LaserWriter file is the extractor's link to your laser printer. From the LaserWriter file comes the name of the printer to download to, so it is very important that a laser printer be selected before the extractor starts. This doesn't mean that you have to select a printer from the Chooser every time you use STD; it means that, at some point in the past a printer was selected using that LaserWriter file. So if you choose another printer in the Chooser, the extractor will use that printer.
- STD does an exitserver when it permanently downloads files, so any '.ps' files that you permanently download shouldn't.
- STD does no syntax checking of '.ps' files, so be sure they're OK.
- When permanently downloading files, the extractor assumes your printer's password is '0'. If it isn't, the set won't be downloaded because of a PostScript error. You can change the password that the extractor uses, but you'll have to do it for every set you make. The exitserver resource is the first POST resource in the set.
- STD doesn't do TrueType.

- While you can quit a job in progress, I don't recommend it unless you're temporarily downloading. If you quit while a permanent download is happening, you could leave a font half–defined, which would be ugly if the printer subsequently used the font.
- Holding down the option key while a set is launching causes the set to quit.

Trouble[pow!]Shooting

- STD can't find my printer

  Make sure that there's a printer selected. The easiest way to do this is to choose 'Print Window' from the Finder, and see what's after the word 'LaserWriter'. If there's nothing between the quotes, choose a printer from the Chooser. Or, someone might be using the printer, preventing STD from opening it. You can tell by this: if you see the sentence "Opening Printer: xxxxxx", the printer was probably busy. If you see only 'Waiting for the specified number of minutes', the printer never came on–line

- Some files don't download

  Make sure that the file still exists by turning off the 'ignore file–not–found' option.

  Be sure that your printer has enough memory to handle the amount of stuff you're downloading. STD doesn't check the printer memory when you're permanently downloading, and with a few fonts you can exceed the memory of most stock printers. If your printer only has 1MB, you can download about 1 font.

- When I use the LaserWriter Font Utility to see if the fonts have been downloaded (by doing a font list before & after downloading) the fonts don't show up.

  The LWFU is lazy, and doesn't update its font list every time you choose 'List Printer Fonts…'. You'll have to quit LWFU and run it again to see that indeed, the fonts have downloaded.

  If the fonts still don't show up, make sure you're permanently downloading the files.

- My printer exploded

  See "Legal Stuff" below.

The Fee

If you like STD and it makes your life easier, send me $20 and help me support my habit. STD is not free, unless you don't pay. Please send cash, checks or money orders (no credit cards, please, unless they have high credit limits) to:

Manuel Veloso
9 High Rock Way #3
Allston, MA 02134–2414
CIS: 70365,1426
AOL: FISH26

If you have improvements, suggestions, problems, comments, hate mail, post a message on AOL or CIS. This program is still far from finished…

Thanks to all those who have messaged!

Legal Stuff

This product should work in the manner described above. If it

doesn’t, throw it away. While I’ve tried to make it bulletproof, you the public must realize that I can’t cover every conceivable thing that you might do. Thus, if your printer explodes, your machine bombs, you lose that Ph.D. thesis you’ve been working on for the last fifteen years, if Elvis comes and visits, if you get promoted, or if any bad, nasty, or evil thing happens because of this program or because of the behavior of this program you agree you will not sue me, my relatives, or my cat. If you do get promoted because of this program, please tell me who your boss is and how I can get one. This product cannot be distributed by disk or CD-ROM on any organized scale without permission, unless you’re a user group. On–line distribution is allowed, of course. Violators will be persecuted.

Version History

1.0 First version

1.02 Fixed some problems with the extractor, and added a few doodads

- If there were too many files in the set, the extractor would run out of memory. STD now increases the extractor's partition size by a few hundred bytes for every file.
- The extractor might not have been able to find a file on a file–not–found error due to a wrong argument size.
- Added an option to temporarily download the set, for '.ps' documentation people
- Added Balloon Help to the Finder icon of the set listing the contents.
- Revised Balloon Help from 'hrct' to 'hdlg' so that enabled/disabled item would have different BH text.

1.05 More goodies were added

- Keys are active from the cdev window.
- Made it so that changing an option would enable the 'Save' button
- Added the new search path for the extractor
- Killed off the required 'Select a LaserWriter' thing
- "Add All" button put into the "Add File" SFGet dialog
- Revised the documentation for more behavioral details
- Fixed extractor's 'last file' bug.
- Removed set list from Balloon Help due to a Finder bug. Also, lists could become longer than the window (ugh!) which looked really ugly.
- Eliminated some calls which made STD Sys7 dependant.
- Extractor's memory size now is expanded by the size of the list instead of 1K per file.
- General tuning of the program.